11-27-2020

Preventing Injuries while Training for an Endurance Event

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A final project presented to the faculty of the
Instructional Design Master's Degree Program
University of Massachusetts at Boston

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in partial fulfillment for the requirement of the degree
MASTER OF EDUCATION

November 27, 2020

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Abstract

Team FX is a team that trains for endurance events. Coach Gary Walker launched the team in 2005was started by in response to his own experiences training with other endurance event teams. The training regimens of these teams scaled too quickly and were too intense for most athletes, resulting in the fact that he and many athletes on the teams were consistently sustaining injuries. Coach Gary researched and worked with many professionals to develop coaching materials for his own team, Team FX, in order to make endurance event training more accessible and less injury ridden. However, each season, there are still several athletes on Team FX who sustain injuries during training. As a result, the coach reached out to this designer to revamp the injury prevention section of his coaching materials. This designer used the ADDIE method to design a learning intervention comprising 3 modules that combine videos, graphics, text, and discussion forums to enable participants to learn about the content, and to engage with the content and one another in a variety of formats.

Table of Contents

Context of Team FX

Team FX is a group that trains for long-distance races. Amateur athletes who join Team FX come from all walks of life. At the beginning of the season, these amateur athletes pay a one-time charge that covers a coaching fee and the entry fee for the endurance race the athlete chooses to train for and participate in. Along with training athletes to complete an endurance event, the team raises awareness and funds for SAFE Children's Shelter in Austin, TX.

The Team FX training program is designed and run by the team's founder and coach, Gary Walker, who touts Team FX as a "couch-to-race" program. The goal of the program is to support all athletes through successful completion of an endurance event of their choice (10k, half marathon, or full marathon), and to have all athletes finish their endurance events safely at their own pace, without injury. This approach enables the members to make, focus on, and achieve their personal goals with the support of a team.

However, Team FX has not had 100% success meeting this goal, in part, due to injuries sustained by some amateur athletes training for their races. To address the problem of Team FX amateur athletes sustaining running/training injuries, the coach of Team FX engaged with this designer to develop a learning intervention. The learning intervention has been designed to inform Team FX athletes about common overuse injuries sustained while training for an endurance event, and about how to prevent those injuries. As a member of the team, the designer not only has been a participant of the current coaching program but has had to sit out of her target endurance event due to injury.

On average the team consists of 31 athletes per season, with an average of 77% of athletes who started the season with the team completing their training and participating in the race of their choice (10k, half marathon, full marathon). Unfortunately, approximately 7 runners

per season do not complete their training, in many cases due to injury. This learning intervention comprises an athletic training program designed within a Learning Management (LMS) to be accessed by athletes on Team FX. The educational content includes videos, information, training handouts, and hosts written discussions among team members and the coach intended to create an interactive and engaging learning experience. The Team FX coach designed all his training materials based upon a combination of personal experiences, consultations with experts, research he conducted, and leveraging feedback from the athletes on the team.

The team meets in person (or post COVID over video call) once a week for a training session. The week prior to the first training session of each season, the coach sends an email to disseminate team news, upcoming dates, and a link to that week's coaching notes. The coaching notes are usually several pages of text heavy content, which can only be found in his weekly email to the athletes. Each week the athletes meet for the training session on Saturday morning. The session starts with warm-up and a predetermined run, run-walk, or walk depending on the athlete. There are several categories of athletes on Team FX. Athletes are first categorized as a racer or pacer. A racer is an athlete who plans to run the race, a pacer is an athlete who plans to walk the race. Athletes are also categorized by the endurance event they are choosing to participate in; full-marathon, half-marathon, or a 10k. Based on the athletes' racer/pacer status, and the endurance event they are participating in, they have specific start times for each training session. These start times are set by the coach to enable all athletes to end the training session at the same time in order to enable all athletes to participate in the stretching and coaching session.

The stretching session lasts about 20-30 minutes and is followed by the coaching session. The coaching sessions can range from 20 minutes to almost 2 hours, and the coaching sessions are designed for all athletes, regardless of the type of athlete or endurance event each is training

to complete. The average coaching session is around 45 minutes to 1 hour. During that time, the coach reads directly from the coaching notes that were sent out in an email prior to the Saturday session and stops to quiz the session attendees to see if they can remember specifics from the notes. These oral quizzes usually are met by silence, though at times members of the team who have trained for a few years will speak up, since they have heard these sessions before.

The coach usually updates the materials after each training season or two, to take advantage of new research he is conducting, or to address injury patterns or patterns in which athletes have proved to be ill-prepared for race day, in which cases the coach will beef up parts of the training content. However, the content in the materials are dense and text heavy: The coach has received feedback from session participants that the coaching materials are too long and hard to follow. Current injury prevention techniques the coach uses in his injury prevention materials and coaching sessions includes:

- pre-running warm-ups
- post-running stretching
- core strengthening exercises.

Supporting Research

Sports injuries are ranked as the second most common type of injury after domestic accidents (3.7%), the total annual incidence of injuries being about 2 million in Germany alone (Schneider et al. 2006). Franke et al. (2019), conducted a research study during a 16-week period to determine the rate of running-related injuries (RRIs) in athletes training for the Utrecht Marathon. In total there were 161 runners studied, 115 training for the half marathon, and 46 training for the full marathon. RRIs were defined in the study as follows: “An RRI was any self-

reported complaint involving muscles, joints, tendons, and/or bones deemed by the runner to be caused by running. To be classified as an RRI, the complaint (1) had to be present for at least 1 running session, and (2) should have reduced the distance, speed, duration, or frequency of running." The study found that one in every three runners reported an RRI in the 16-week period that lead up to the half or full marathon.

In order to prevent running injuries, specifically the five most common running injuries; Achilles tendonitis, chondromalacia, iliotibial band syndrome, plantar fasciitis, and shin splints, Burfoot (2004) identified, the training program needs to take into account current research into studied and tested injury prevention techniques. The question is then, what is the right formula for a training program that helps prevent injuries? The answer is that it depends upon the athlete, which suggests that training programs should be tailored to the individual. With that said, there are still general guidelines all runners should follow when preparing for a long-distance race.

Engaging in a warm-up activity is beneficial for several reasons; it creates warmth and increased blood flow in the muscle, and "provides a protective mechanism to the muscle by requiring a greater length of stretch and force to produce a tear in the warmed muscle" (Woods et al. 2007). This protective mechanism allows athletes to have a wider range of motion with less risk of injury.

Studies regarding the value of stretching for injury prevention have produced mixed results. However, Woods et al. (2007) pointed out that some of the mixed findings could be due to variations in the way studies define injury. In a study conducted by Pope et al. (2000) the researchers include muscle, joint, and ligament injuries in their definition of soft tissue injuries, therefore reporting results that showed "no significant effect of stretching on all-injuries risk." Conversely, a study conducted by Amako et al. (2003) which classifies all injuries by individual

type concludes that "the occurrence of muscle/tendon-related injuries and low back pain was statistically significantly lower in the stretching group." The reader may note that these research studies were conducted 15+ years ago. It is important to point out that these studies noted that more research needs to be done in this area. A literature review conducted by Kozinc et al. (2017) investigates the effects of movement therapy or training interventions states the following:

> The current meta-analysis does not provide high-quality evidence to support the effectiveness of movement therapy or training modification-based interventions for preventing running injuries. Further randomized controlled trials and prospective cohort studies are desired and should be based on the previously acquired knowledge on eliminating risk factors for sustaining running-related injuries. Individual treatment should be used in clinical practice until an effective generalized preventive program is established. (p. 7)

While research studies may be insufficient at this point in time, there is ample research in the physiology of how flexibility affects our joints and muscles. Walker (2013) states in his book *The Anatomy of Stretching,* "Tight stiff muscles limit our normal range of movement. In some cases, lack of flexibility can be a major contributing factor to muscle and joint pain." This is due to the tightness interfering with the way the muscles contract and relax. Muscles that do not contract or relax properly become short and tight, which causes a loss of strength and power when engaging in physical activity. Tight muscles can also result in poor blood circulation which causes muscle fatigue. Muscle fatigue inhibits the muscle's ability to repair and recover from exercise. "Any one of these factors [muscle tightness or fatigue] can greatly increase the chances of

becoming injured. Together they present a package that includes muscular discomfort, loss of performance, an increased risk of injury, and a greater likelihood of repeated injury." (Walker, 2013)

In Amby Burfoot's (2010) edition of *Runner's World Complete Book of Running*, Burfoot explores the connection between flexibility, running and injuries. "Runners need to learn to listen to their bodies not only to determine what level of training exertion was right for them but also to detect minor problems and correct them before they become injuries" (Burfoot, 2010). Burfoot (2010) pulls research from Dr. George Sheehan, an expert on health and fitness and former medical editor for *Runner's World* magazine. Dr. Sheehan points out that there are 3 things that happen when you run. The first, is that you become a more effective runner. The second, is that you slowly lose flexibility over time. Your muscles grow tighter and are therefore more vulnerable to injury. To prevent this, runners should engage in slow gentle "yoga-like" (Burfoot, 2010) stretches. The third thing that happens to you when you run is that you "develop strength imbalances, muscles at the back of the legs overpower those at the front, which is a set-up for injury" (Burfoot 2010). In order to compensate for that, runners also need to build muscle strength uniformly.

In addition to increasing flexibility to protect your joints and muscles, runners should also build their core strength. The core is the center of our strength, balance and forward movement. De Blaiser et al. (2018) defines the core as "the foundation of lumbopelvic dynamic control that allows for optimal production, transfer and control of force and motion, which is transferred throughout the kinetic chain during functional movement." De Blaiser's literature review "revealed that various core stability related components can be considered as risk factors in the development of different types of injuries. Core strength, core proprioception and neuromuscular

control of the core were found to be a risk factor in the development of lower extremity injuries." Blagrove et al. (2020), also discovered resistance training (defined as bodyweight exercises, stretching, foam rolling, and core stability exercises), were particularly effective for strengthening the musculature around the hips, and have "been shown to be effective at minimizing the risk of some types of overuse injury."

Most academic research studies each of the interrelated components discussed above, warm-up, stretching, strength training, in isolation of one another. Academic research has not been conducted to account for the benefits and/or constraints of a comprehensive training program. All the research articles searched addressed the fact that more research needs to be done to determine effective training programs for runners. However, when we look at how the body responds to endurance running training, doctors can prescribe specific warm-up, stretching, and strengthening exercises that combat the negative effects of endurance running on the body.

Analysis

Analysis Plan

At the outset of this intervention design project, Coach Gary approached the designer to discuss the specific need to emphasize the injury prevention components of his training materials. The designer conducted an interview over Zoom with the stakeholder and SME, Coach Gary, to determine his needs regarding redesigning the instructional materials and training sessions related to his team's injury prevention training program. The interview questions the designer posed to Coach Gary are provided as Appendix A.

The designer also conducted a survey using Microsoft Forms to determine what the athletes' current experiences are using the injury prevention techniques, to learn what they do when they feel pain or develop an injury, and to find out what their experiences are with the current training method. The coach reached out to the athletes to ask for volunteers to take part in the injury prevention learning intervention pilot. He received responses from 15 athletes interested in taking part in the program. Out of the 15 interested, 10 athletes responded to the survey. The survey consisted of 10 questions, some of which include multiple segments. The 10 questions used for these interviews comprise Appendix B. The survey encouraged participants to give a variety of answer options, short-answer, multiple choice, choose all that apply, and some questions were asked using a Likert scale.

Analysis Findings

During the stakeholder interview with Coach Gary, the designer learned that the coach's goal is to have at least 85% of the team complete the endurance event for which each is training in each given season. (As stated earlier, the current completion rate is 77%, with most of the 23% who do not complete their event comprising athletes who end their training early due to injury). During the interview, the coach clarified that the athletes exhibit a wide variety of athletic ability. Some athletes on the team have been taking part in endurance events for 20+ years, while others are taking part in an endurance event for the first time. The amount of time athletes have been on Team FX, following Coach Gary's training program, also varies widely; a few athletes have been on the team from the 2005start of the program, while others are newer team members. The coach expressed the need to develop learning intervention materials that will be used by team members regardless of their levels of experience on the team and their athletic abilities.

Based on the feedback the coach has received from end-of-season feedback forms, he concludes (or he and the designer have concluded) that the weekly training materials need to be revamped to make the materials more engaging and interactive so as to encourage the amateur athletes to access and explore the materials during their busy business weeks before participating in each Saturday training session. The coach sent his catalogue of injury prevention materials to the designer. As noted above, the catalog comprises materials he has developed himself through years of research, discussion with medical professionals, and anecdotal observations he has made during his 15 years coaching Team FX.

The survey given to athletes on the team showed a wide range of experience on Team FX; some were new members; others had been on the team for 8 years. The average length of time survey participants had been members of Team FX was about 4 years.

Responses to the part of the survey designed to measure previous rate of injuries and to determine if the athlete engaged in warm-ups, stretches, and core strengthening exercises varied widely, and did not seem to correlate with each athlete's number of years on the team. On average, 40% of respondents reported they sometimes or rarely engaged in a warm-up activity before a training session, and 60% indicated they usually or always engage in a warm-up before a training session. While 90% of respondents stated they usually or always stretch after a training session. When it comes to implementing core exercises throughout the week, 20% of respondents stated they engage in core exercises three to four times a week, 20% stated they engage in core exercises at least twice a week, 40% stated they engage in core exercises only once a week, and 20% stated never engage in core exercises. These data suggest that while a majority of respondents are engaging in stretching after a training session, most of the

respondents are not combining stretching with other injury prevention techniques such as warming-up before each training session and/or doing core exercises at least three times a week.

According to the survey, 50% of respondents have experienced an intermediate injury requiring professional attention or a serious injury requiring immediate medical attention and/or surgery. 30% of respondents have experienced a minor injury that required them to take time off from training. It is important to note that the survey did not account for how often a respondent is injured, or how recently these injuries occurred.

Most athletes taking this learning intervention have been part of Team FX for many years and have received coaching and training from Coach Gary. However, based on the survey results, athletes are still running through pain at high rates, and 80% have experienced intermediate to severe injuries. Therefore, the data does point to the need for a comprehensive injury prevention learning intervention program that doesn't just tell the athletes why it is important, but incorporates self-reflection and discussion in order for the athletes to internalize the importance of these injury prevention techniques.

One question stood out as an interesting data point. When asked "Normally when you feel pain during a training session you will…" In response to this survey question, 70% of athletes said they would take a walk break or at least stop to assess the severity of their pain but would continue the training session even though there were still pain. Only 30% of athletes stated they would only continue if the pain subsided. This points to a gap in the learning materials. Even though the coach reiterates that team members should tell him the moment they feel pain, and should never push through the pain, it seems clear from the survey data that a high percentage of Team FX athletes are still pushing through the pain, despite the fact that training

materials attempt to make clear that pushing through pain while training for an endurance event can lead to the development of injuries.

In addition to surveying the athletes around their training habits, athletes were also asked about different learning intervention delivery options they would prefer (eLearning, online repository of learning materials, online forum to interact with other team members, and short videos). Athletes showed most interest in having an online repository of learning materials, short videos, and an online forum to interact with other team members. Since intervention developed is an optional learning intervention that athletes on the team will participate in at their own discretion, the learning intervention needs to be designed in a way that is easy to access and has various engaging and interactive elements.

The analysis revealed that the learning intervention would be most beneficial if the materials were housed in an online environment where athletes can also have discussions among themselves regarding the materials. The learning intervention materials and online platform also needs to be set up in a way such that materials can be accessed easily by the coach in order to facilitate his ability to update or change materials as needed.

The learning intervention materials need to be robust, covering specific reasons that specific behaviors can help prevent injuries. The materials also need to be broken down into manageable chunks, since the athletes will be completing this training regime on their own time during their busy daily schedules. The learning intervention needs to be provided in multiple formats, handouts, videos, and discussion forums in order to create a learning environment that athletes look forward (on some level) to checking each week, formats which make it easy for learners to reference learning materials from previous weeks. Assessment of the materials will be done through short scenario-based interactions and discussion posts. This way, athletes are

unlikely to feel they are being "tested" on materials, but instead can check their knowledge and engage in meaningful discussions with their teammates regarding the materials.

Problem Statement

On average 77% of athletes who started the season with the team complete their training and participate in the race of their choice (10k, half marathon, full marathon). Currently there is not hard data on how many of the 23% drop out due to injury versus other reasons. However, the coach does reach out to the athletes who do not complete training, and the number one reason stated for dropping out is injury related. On a team which averages around 31 members per season that means around 7 people per season do not complete their, many of those due to injury. Prior to completion of this learning intervention, Team FX provided extensive learning materials and weekly training sessions covering injury prevention topics, but the learning materials and sessions were not deemed by Coach Gary or by team members to be adequately interactive or engaging.

Audience

The target audience for the learning intervention are the athletes who have are members of Team FX, athletes who (as noted above) come from a wide variety of athletic backgrounds and race training experience, some of whom have been on the team for years and who train for multiple long-distance races a year, others of whom are just joining Team FX for the first time.

Goals

The goal of this learning intervention is to get at least 86% of the athletes on Team FX to the finish-line injury free. Athletes will build knowledge about injury prevention techniques while training for an endurance event. The athletes will learn about the benefits of warm-ups

prior to a training session, about the benefits of stretching after a training session, and athletes will also learn benefits of conducting core strengthening exercises multiple times a week.

Design

As the needs analysis conducted for this learning intervention identified, Team FX members needed to create a training routine consisting of warm-ups, stretching, and core exercises in order to prevent stress injuries so as to complete their individual endurance events. What follows in this section describes the learning objectives for the course, the instructional strategy, and an overview of the material that will be used to deliver the instruction.

Learning objectives

Using the learning intervention materials, the athletes will be able to:

- Explain how running injuries are caused during training for an endurance event.
- Identify the six most common injuries incurred while training for an endurance event.
- Create a warm-up routine that fits the training program's guidelines and the lifestyle of the athletes.
- Explain how engaging in warm-up activities prepares our body for a training session.
- Explain the value of stretching after a training session when training for an endurance event.
- Create a stretching routine that fits the guidelines of the training program and their lifestyle.
- Explain the value of strengthening your core when training for an endurance event.
- Create a core routine that fits the guidelines of the training program and their lifestyle.

Instructional Strategy and Materials

The instructional strategy for this learning program has been to house the learning intervention materials in Canvas LMS. Since the program put together by the coach features weekly learning sessions, this makes the most sense. Using the LMS, Coach Gary will be able to continue to upload weekly sessions, change and adapt the materials as he sees fit in the future.

The materials for the learning program include short videos, VoiceThread presentations, downloadable handouts, and discussion forums for the athletes. Learning materials were designed to be taken and reviewed in any order, allowing for more experienced athletes who have developed injury prevention strategies that work for them to reference and complete materials only as needed, while still participating in the discussion forums. This has allowed all athletes to determine the pace and cadence with which they will engage in and review the materials. The format was designed so all athletes can go back and review previous week's learning materials as needed.

The learning program has been divided into three sections:

1. Introduction to injury prevention
2. Warm-ups and stretching
3. Strengthening your core

Included in the table below is an outline of the instructional materials and strategy that will be used in the injury prevention course. The table breaks down each section so the reader can identify the goals, learning objectives, activities, and assessment for each section of the learning intervention.

Learning intervention title: Preventing Injuries while Training for an Endurance Event

Section title	Goal and learning objectives	Activities	Assessment
Introduction to Injury Prevention	**Goal:** The goal of this section is to introduce learners to the concept of injury prevention, its importance, and the most common running injuries. **Learning objectives:** Explain how running injuries are caused during training for an endurance event. Identify the five most common injuries incurred while training for an endurance event. Identify appropriate steps to take when pain is felt during a training session.	Intro paragraph Introduction to IP video Diagram of common injuries and explanations Handout: Taking ownership of injury prevention	**Storyline interaction:** Branched storyline interaction where athletes encounter a scenario and choose how to respond to it using information learned in this section. **Discussion forum:** What do you do when you feel pain during a training session?
Warm-ups and Stretching	**Goal:** The goal of this section is to explain how warm-ups help get your body and muscles prepped for a training session, and how stretching is designed to keep you flexible, balanced, and injury free. **Learning objectives:** Create a warm-up routine that fits the training program's guidelines and your lifestyle. Explain how engaging in warm-up activities prepares our body for a training session. Explain the value of stretching after a training session when training for an endurance event. Create a stretching routine that fits the guidelines of the training program and your lifestyle.	Intro paragraph on warm-ups Video on the science of warm-ups VoiceThread over stretching Handout: Warming-up with Team FX Stretching with Team FX	**Discussion forum:** What are the benefits of warming-up and stretching? If you use them in your daily practice, explain your experience incorporating warm-ups and stretching. Do you see benefits? What about drawbacks?

Strengthening Your Core	**Goal:** The goal of this section is to explain how building core strength enables you to slowly activate and develop strength, balance and stability to your muscles and joints. **Learning objectives:** Explain the value of strengthening your core when training for an endurance event. Create a core routine that fits the guidelines of the training program and their lifestyle.	Intro paragraph about core strength Video detailing the importance of strengthening your core Bulleted list over advantages of strengthening your core Handout: Strengthening Your Core with Team FX	**Discussion forum:** How can you or do you make time to add core strengthening exercises a part of your training program?

Development

Videos, graphics, text, and discussion forums were included in the learning intervention as a way for the participants to not only learn about the content, but to engage with the content and each other in a variety of formats. The purpose of the discussion forums are to not only enable learners to connect the content in the module to their experiences, but to also have a conversation with other team members to share and learn from other experiences in the team.

The format and structure of the content was chosen based on participant survey feedback and to ensure the LMS and the content within can easily be taken over and replicated by the coach to post learning content for Team FX in the future.

The course is comprised of three modules:

- Introduction to Injury Prevention
- Warm-ups and Stretching

- Strengthening Your Core

The first module, Introduction to Injury Prevention, Coach Gary addresses the participants in a video that gives a quick history of the team, and how he has gathered information on injury prevention in order to develop the team's learning materials. The main content of this module emphasizes the most important step in injury prevention, which is identifying the warning signs of a developing injury, when to discuss pain with the coach, and where on the body common running injuries occur. Included in the module is a diagram of a runner, showing where on the body these common running injuries strike, and a PDF that gives a definition of these running injuries, and how they are caused. The module then outlines how athletes can be proactive in preventing running injuries by using rest, ice, compression, elevation (R.I.C.E.), strength training, and contacting professionals like doctors, physical therapists, and chiropractors to diagnose, treat, and determine the cause of you injury to prevent it in the future.

The first module ends with a simulation built out using Storyline 3. The simulation follows Sophie, an athlete on Team FX. During a training session, she feels pain in her knee. The learners help Sophie decide what to do by selecting an action she can take. Each action branches to a consequence (positive or negative depending on the selected action), and then gives another decision for Sophie to make regarding the pain she is feeling. Learners are encouraged to go through the simulation multiple times to see what the different outcomes are based on the decisions they have Sophie make. Following the module is a discussion forum for the learners to discuss what they do when they feel pain during a training session, what the results of that decision was, and if their action solved the problem, or if the pain continued. This enables the learners to connect the content in the module with their experiences, and to start a discussion

over how they have handled pain during a training session in the past, and how they might choose to hand it in the future.

The second module has two sections: A Warm-up section and a Stretching section. The Warm-up section details how warm-ups help athletes avoid common overuse injuries by building our heart rate and warming up our muscles and joints. This explanation is followed by a video which dives into the science behind warming up muscles before a training session. The Warm-up section ends with icons grouped in a 2x2 array explaining how Team FX warms-up before a training session.

The Warm-up section is followed directly by the Stretching section. The Stretching section details how to stretch, when to stretch, and how to be mindful of your body not only during stretching, but also in your daily life. The section ends with a downloadable PDF of the Team FX Stretching Guide. This guide explains the stretches Team FX engages in after a training session. Each stretch is accompanied by an explanation of the stretch, and an image showing the stretch being done, along with red arrows showing the areas of the body that are being stretched, and blue arrows that show the direction of stretching movement. The second module ends with a discussion forum asking learners to discuss the benefits of warming-up and stretching, to explain their experience with incorporating them into their training session, and any benefits or drawbacks they experience.

The third and final module of the course is Strengthening Your Core. This module explains what your core is, how your core affects you as an athlete, and the importance of strengthening your core when training for endurance events. The module relies on a video to explain and show what core strength is, and the differences between a strong versus a weak core. The module ends with an explanation of when and how you should incorporate core

strengthening exercises into your training routine and includes a downloadable and printable PDF handout with Team FX's Core Strengthening Guide. This guide gives the athletes exercises they can do to strengthen their core. Each exercise is accompanied by an explanation of the exercise, red arrows showing the areas of the body that are being worked, and blue arrows to show the direction of movement. The discussion forum that followed this section asked learners to think about they can (or how do they already) make time to add core strengthening exercises a part of their training routine.

Implementation

Injuries are one of the main reasons members of Team FX are unable to complete their endurance event and can also be a factor in team members dropping out of the team. With this in mind, the coach decided to send the announcement about the learning intervention being developed to current and past team members. The designer and coach made the decision to announce the launch of the course 6 weeks in advance of the two-week period during which Team FX members were asked to complete the course.

On September 16th, 2020, the coach sent email messages to an email distribution list Coach Gary keeps in order to send updates or announcements to current and past members of the team. (See Appendix E for a copy of the email sent to Team FX members regarding the launch of the learning intervention). In total, the N= for course invitations was 180. This was done as an effort to elicit interest in the program, and only those who responded to an initial announcement about the offering were subsequently sent communications regarding the learning intervention. Team members were asked to respond as soon as possible to the email, and within a week we received 16 responses from members who were interested in the learning intervention.

A pre-survey (as seen in Appendix E) was then sent to the 16 team members who expressed interest in the learning intervention. (Survey results are discussed in the above Analysis section of this paper.) Out of the 16 who expressed interest, 10 participants completed the pre-survey.

The 10 participating athletes were given two weeks from October 31st to November 14th to complete the course at their own pace. The designer was the host for the Canvas site and added an account for each Team FX athlete to the Canvas course. The designer then sent an email message which included a link to an online, streaming video (as seen in Appendix E). The video detailed how to create a Canvas account and how to navigate the course. Participants were also encouraged to reach out to the designer if they needed any additional assistance. Since not all current members on the team participated in the learning intervention, the coach did not discuss the learning intervention during the Saturday training sessions.

Out of the 10 team members who took the pre-survey, six team members completed the injury prevention course in Canvas. The free version of Canvas gives some analytics to show when and how much time was spent in the course. All participants completed started and completed the course within a day.

Canvas reports the total amount of time spent in the course; the table below shows how much time each participant spent in the course, and notes if that participant is a current or past team member.

Participant number	Time spent in course	Current or past team member
1	1hr 26min	Past
2	2hr 2min	Current
3	16min	Current
4	50 min	Current

5	11min	Past
6	20min	Past

While there is not enough data to arrive at any definite conclusions, it seems likely the current team members (with the exclusion of the one current team member who spent 16 minutes in the course) spent more time in the course. This could be due to current team members perceiving the course to be more relevant to their current situation, since they are training for their endurance event. However, the past team members could also be training for an endurance event or could currently be running/walking long distances on their own. This data point was not collected during the process but would be a valuable data point to collect when full implementation of the course is rolled out.

Evaluation

Noting that six learners completed the course, findings from the pilot run of the course are provisional, yet worth examination. (Survey responses are provided in Appendix F.) The level 1 evaluation in Kirkpatrick's (2006) evaluation model was a post-survey to gauge the athletes' perceptions of the learning intervention. The purpose was to find out what the athlete's experience with the learning intervention program had been, and to determine how relevant they had found the learning materials incorporated in the program.

The survey results showed an overall positive response to the learning intervention. When asked to rate if the course increased their understanding of preventing injuries while training for an endurance event, 100% of respondents chose agree and strongly agree (see question number 3 in Appendix F to read respondent's reasons behind their rating). 100% of

respondents also chose agree and strongly agree when asked if this course changed their thought process on staying injury free while training for an endurance event. (See question number 5 in Appendix F to read respondent's reasons behind their rating.) When it comes to the different learning formats that were presented in the course, respondents felt text, videos, and printable PDF handouts all helped add to their understanding of the information presented in the learning intervention. Discussion forums were rated as the least helpful of the learning formats.

For this learning intervention the level 2 evaluation per Kirkpatrick's (2006) evaluation model mainly focused on formative assessments. The program needed to account for athletes fitting this learning intervention into their daily lives. The designer strove to keep assessments as authentic as possible, since participation in the course will always be voluntary and self-motivated, for which reason the inclusion of knowledge checks and test questions would be out of context for a course with this purpose and audience. Since an important aspect of Team FX is the creation of a community of runners, the designer sought to stimulate this community development using topical discussion forum. These forums are intended to serve as a place for athletes to respond to a prompt, sparking discussions among participants, and thus help to create a connected community of athletes and learners. There is a plan to evaluate the effectiveness of these discussion boards in the future, as athletes get used to the format and continue to use these forums to connect their experiences to the learning materials and to each other.

Due to the time constraints, a full level two evaluation is out of scope for this project. Here, it should be noted that while, for the sake of the pilot implementation, all activities in the Canvas environment experienced by the pilot learning population occurred over an artificially constrained two-week period. During full implementation, one topic will be introduced during each of three sequential weeks, and each week's topic will be discussed by the coach and team at

the Saturday training session. It will not be standard practice for the team to learn about more than one of the three topics (warming up, stretching, and core exercises) in one session, as was artificially the case during the abbreviated two-week pilot implementation

Since the pilot period was bounded over a two-week duration, no substantial longitudinal use of the Canvas environment for the purpose of ongoing community building could occur, nor be studied. However, when the three modules that form the core course are delivered in full implementation modes in subsequent training sessions, participants will be encouraged to remain active within the Canvas community, well beyond the three week period during which they complete the three module course. At those points, it will be worth evaluating level one of Kirkpatrick's (2006) evaluation model.

Evaluating level 3 of Kirkpatrick's (2006) evaluation model will be conducted once the coach has taken over facilitation of the Canvas course. Coach Gary plans to begin housing his training materials in Canvas for all the athletes on the team to access, using the format the designer used in the learning intervention discussed in this paper. The coach plans to conduct regular check-ins with the team members to inquire about how their training is going. This will help him to learn how team members are dealing with injuries that are occurring during the season. The coach will begin to collect data on how team members are dealing with pain or injuries (are they coming to him immediately, ignoring the pain, use the R.I.C.E. method, etc). in order to determine if this new learning intervention is helping team members to change their behavior.

Level 4 evaluation will be conducted at the end of the training season for the next 2 seasons. The coach plans to use data he has collected over the past 15 seasons that measure rates in which athletes are unable to complete their endurance event. He will use data from the next

two seasons to see if there is a change in the percent of athletes who are unable to complete their endurance event. Along with this, he will also begin graphing the injuries reported to him during the season in order to see if there is a trend in injuries. This will help the coach to determine if the format of the learning intervention is influencing the rate of injuries.

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Appendix

Appendix A

Stakeholder/SME interview

Performance consulting:

What do you want participants to be able to do by the end of this training?

How will you know participants are successful?

What are the success metrics/how will you measure success?

What percentage of athletes make it to race day injury free?

What percent increase in athletes making it to race day do you want to see?

Learner analysis:

How much time do the participants have during the week to complete this training?

What level of athletic ability are the participants coming from?

How many years have the participants been a part of the team?

What are the most common running injuries you've seen on the team?

Currently, how does the team learn about injury prevention?

Current training:

What feedback have you gotten on the current training delivery method?

Where do you house your training materials?

Appendix B

Learner survey

1. How many years have you trained with Team FX? (If this is your first-time training with Team FX, put zero, second time training put 1 etc.)
2. Have you ever injured yourself while training for an endurance event?
    a) Never
    b) Some minor discomfort, but nothing serious (including sunburn, chafing, chapped lips).
    c) Minor injury, not needing professional attention, utilized the R.I.C.E. technique, recovered completely by not training for a while.
    d) Intermediate injuries, needing professional attention from a non-medical professional, like a chiropractor, massage therapist, or physical therapist.
    e) This is my first time training for an endurance event.
3. How often do you do the following: (never, rarely, sometimes, usually, always)
    - Do a warm-up activity directly before a training session.
    - Think of your form during a training session.
    - Correct your form during a training session.
    - Stretch directly after a training session.
    - Employ the R.I.C.E. (rest, ice, compression, elevation) after a minor injury.
4. How often do you do the following during the week while training for an endurance event? (never, once a week, twice a week, three times a week, four times a week)
    - Core exercises
    - Posture reset

- Warm ups
- Stretches

5. Normally when you feel pain during a training session you will (choose the answer that best fits your normal response)
    a) Continue with the training session even though you feel pain.
    b) Stop to assess the severity of the pain, but usually continue with the training session even though there is still pain.
    c) Take a walk break but continue with the training session even though there is still pain.
    d) Take a walk break and continue with the training session only if the pain subsides.
    e) Stop to assess the severity of the pain, and do not continue with the training session whether or not you still feel pain.
    f) Stop the training session and do no continue with the training session whether or not you still feel pain.
    g) N/A I have never felt pain during a training session.
6. What are your experiences with the coaching notes sent before a training session? Talk about how/if you use them, what is helpful for you, and what is not helpful for you.

_____

_____

_____

_____

7. Which of the following ways of presenting coaching notes and interacting with the team would you be interested in? Choose all that apply.
    - Short self-paced eLearning courses
    - Online space where an archive of training materials are posted
    - Online space where coaching notes are posted
    - Online forum where you can interact with other team members through discussion boards
    - Short training videos
8. Have you taken advantage of the Team FX BioMechanical Assessment with Dr. Uridel?
    a) Yes
    b) No
    c) I am not aware of this option
9. I think Team FX could improve their injury prevention training by

_____

_____

_____

_____

Appendix C

Learner survey results

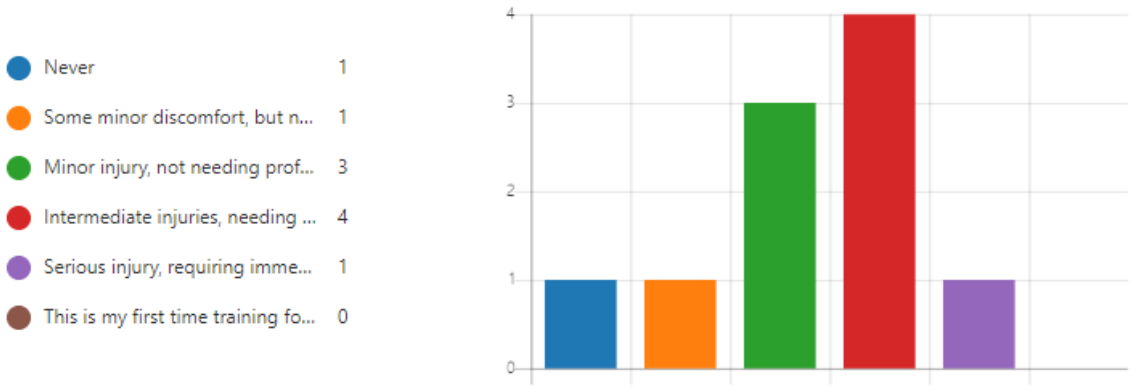
1. How many years have you trained with Team FX? (If this is your first time training with Team FX, put zero, second time training put 1 etc)

10 Responses

ID ↑	Name	Responses
1	anonymous	1
2	anonymous	4
3	anonymous	3
4	anonymous	7
5	anonymous	8
6	anonymous	1
7	anonymous	8
8	anonymous	3 years
9	anonymous	2
10	anonymous	0

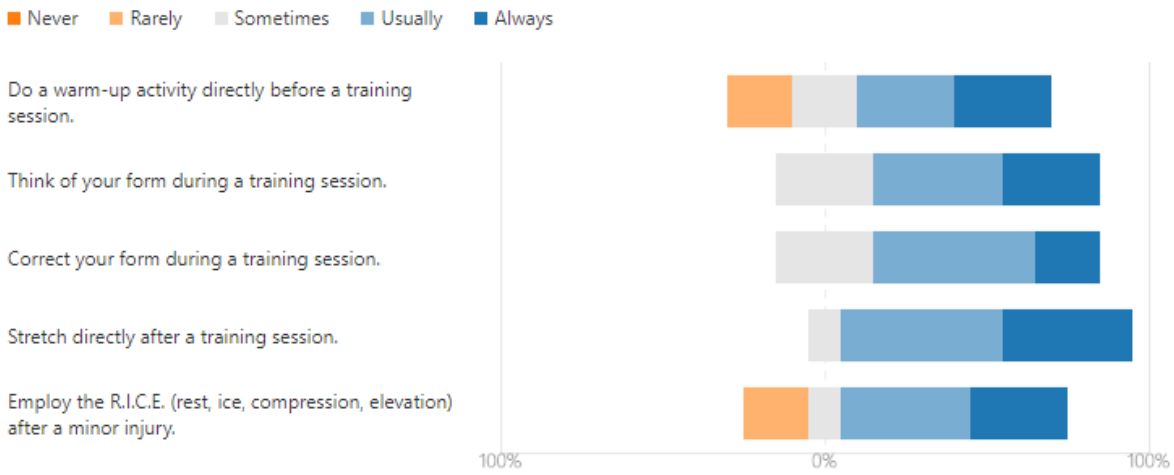
2. Have you ever injured yourself while training for an endurance event?

More Details



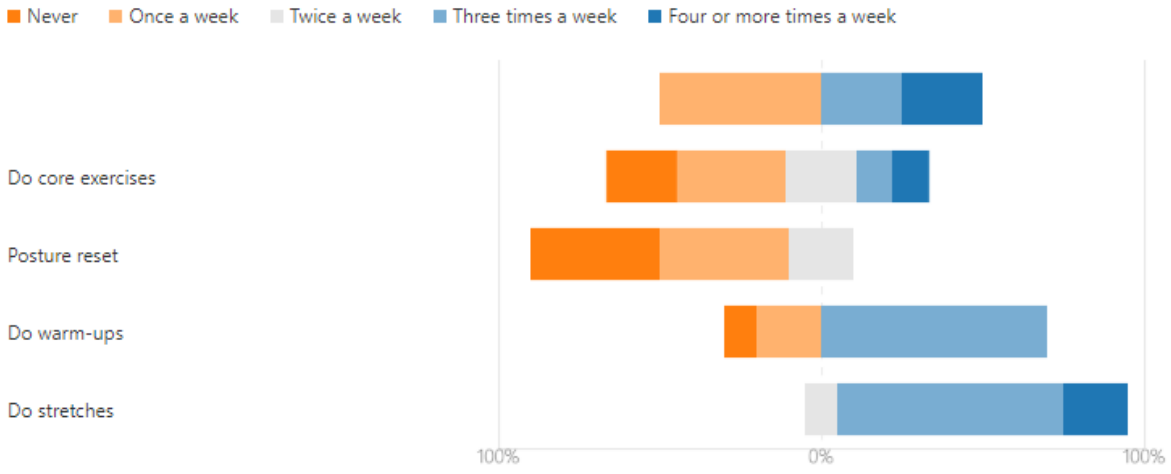
3. How often do you do the following:

More Details



4. How often do you do the following during the week while training for an endurance event?

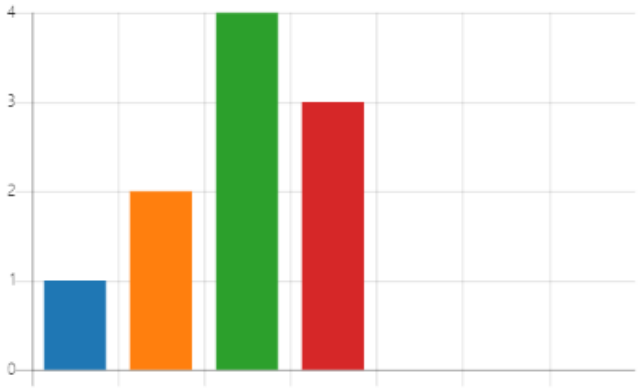
More Details



5. Normally when you feel pain during a training session you will (choose the answer that best fits your normal response)

More Details

continue with the training ses...	1
stop to assess the severity of t...	2
take a walk break but continu...	4
take a walk break and continu...	3
stop to assess the severity of t...	0
stop the training session, and ...	0
N/A I have never felt pain duri...	0



6. What are your experiences with the coaching notes sent before a training session? Talk about how/if you use them, what is helpful for you, and what is not helpful for you.

10 Responses

ID ↑	Name	Responses
1	anonymous	I use them for reference when I need to refresh my memory.
2	anonymous	I read them and they are helpful
3	anonymous	It is helpful to keep me mindful of warm-up and stretching routines
4	anonymous	Sometimes I look at them before the session.
5	anonymous	All the coaching materials provided were very helpful. I would use the materials before training. We always went over them as a team and discussed the techniques in detail. Plus, Gary would always make himself available one on one to review and discuss them in more detail if I had questions or problems. The stretch chart was a go to every time! I loved having those as a reference, and have still referred to it this day even though I am no longer training with the team.
6	anonymous	I read them. I'll use them for reference and for back to them occasionally. I find myself going back to the gear one the most.
7	anonymous	I honestly don't prep much. I find t works best for me to just hit the trail and be mindful.
8	anonymous	it was a good motivator as far as I can remember
9	anonymous	They are fantastic full of great information. Sometimes with my schedule I wasn't able to read the coaching notes until after the training session. Always still helpful.
10	anonymous	It's been many years for me since I have trained with the team so I do not recall specific details. However, I do remember that both the coaching sessions and the notes were pretty essential during my training and I referred back to them during another year when I was training on my own.

8. Which of the following ways of presenting coaching notes and interacting with the team would you be interested in? Choose all that apply.

More Details

- Short self-paced eLearning co... 3
- Online space where an archive... 10
- Online space where coaching ... 8
- Online forum where you can i... 6
- Short training videos 8

9. Have you taken advantage of the Team FX BioMechanical Assessment with Dr. Uridel?

More Details

- Yes 2
- No 5
- I am not aware of this option. 3

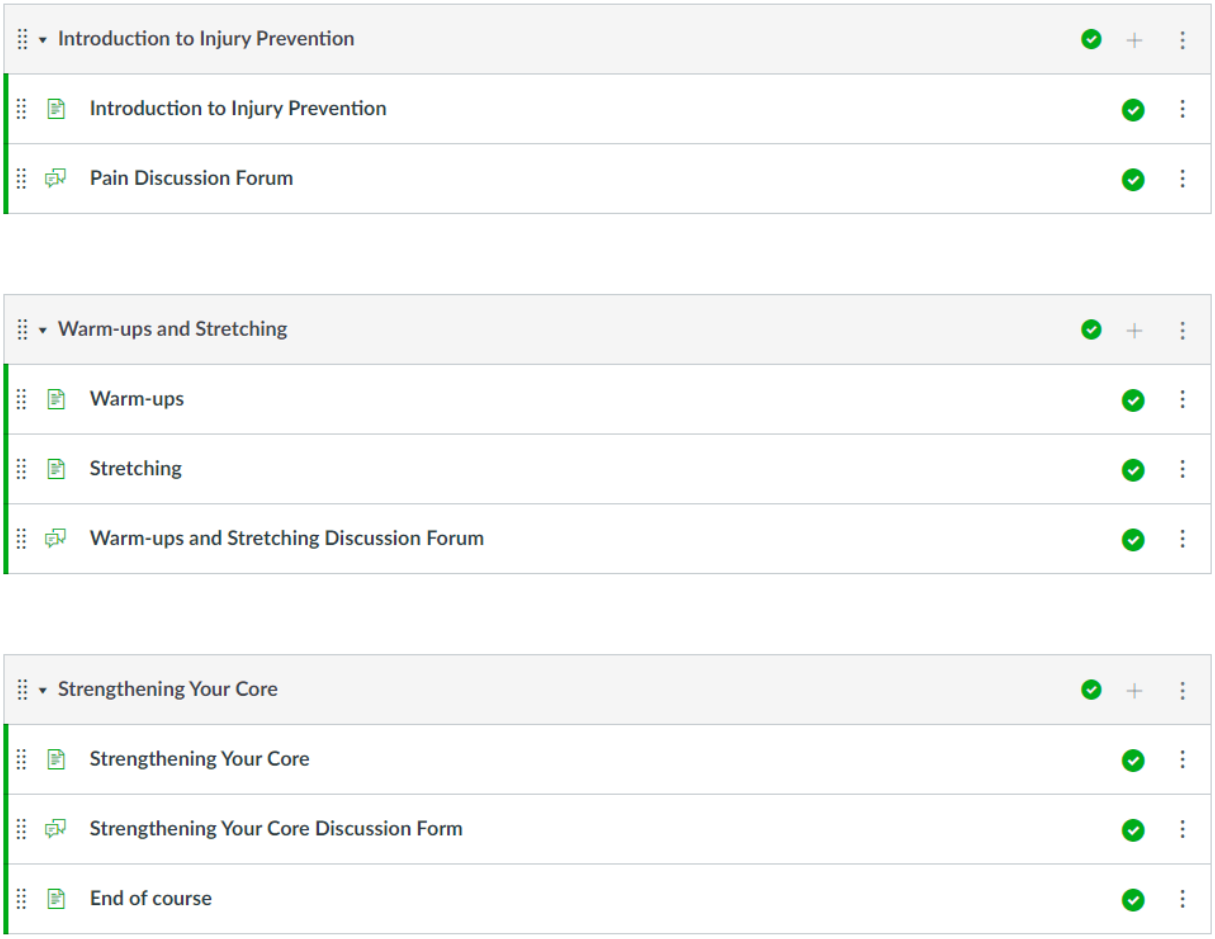
10. I think Team FX could improve their injury prevention training by

7 Responses

ID ↑	Name	Responses
1	anonymous	Describe specific types of common injury and typical symptoms.
2	anonymous	It has been a while since I have been on the team but for me I learned a lot that I still use in my workout routines to prevent injury
3	anonymous	Having discussion after stretching exercises. Have a contact the coach option for injuries.
4	anonymous	I'm not sure.
5	anonymous	I think it's currently very good already.
6	anonymous	I don't really have a suggestions, Gary was very informative with injury prevention.
7	anonymous	Insisting more on core exercises and stretches during the week. For me, I did not even know injuries were possible until I had one. It just wasn't a concept. Mine is as definitely because I was not serious about stretching and core.

Appendix D

Screenshots from the course: Preventing Injuries while Training for an Endurance Event



Introduction to Injury Prevention

Preventing Endurance Event Training Injuries

When we begin any kind of long-term fitness training program, we all hope for injury-free training. However, as we begin, we take our inherited biology and a lifetime of stresses, accumulated habits and old injuries with us. The intention of going into a training program is to improve our wellness. We certainly do not go into it thinking we might end up worse off than we started by slowly developing an unexpected injury.

Sometimes it takes a full season of training before an injury starts to surface, which more than likely could have been avoided.

Watch Coach Gary's video about injury prevention.

Taking Ownership of Injury Prevention

Remember, wherever you get an injury, you will always have that weak spot in your body, making you vulnerable to re-injury. Listen to your body for signs of stress or trauma, but the best idea is always to avoid the stress and injury in the first place.

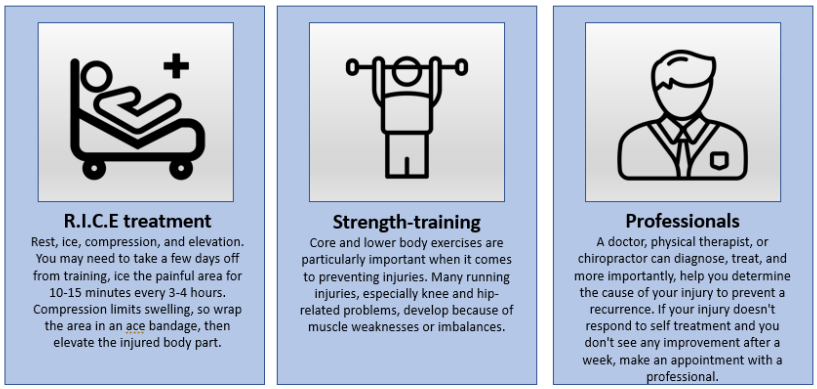
The best approach to preventing running injuries is to be proactive and **not ignore the warning signs of an injury**. By taking steps to treat pain in its early stages (yellow flag) rather than waiting until you have a full-blown (red flag) running injury, you can limit your pain and reduce the amount of time you need to take off from running. Don't push through a hard workout if you're feeling pain because you think missing a workout means you won't reach your race goal. And don't try to push through your weekly mileage no matter what. Resting when an injury is in its early stages will prevent more time off later.

The image below highlights the five most common running injuries.

Click the link below to learn more about common running injuries.

Common running injuries

Here are some ways you can be proactive in your approach to running injuries:



Before we move on to the next section, let me introduce you to Sophie. Sophie is an athlete on Team FX, and one day during a training session, she starts to feel pain in her knee. Using the information we've learned so far, help Sophie to decide what to do when she experiences pain during a training session. Feel free to run the scenario several times to see what other choices Sophie can make, and what the outcomes of those choices are.

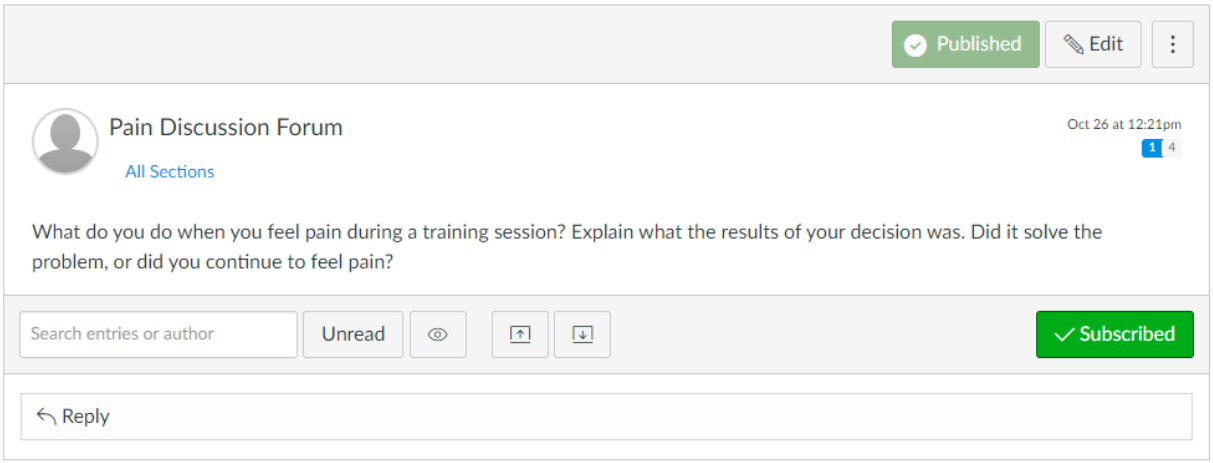
Click here to help Sophie decide what to do when she feels pain during a training session.

Note: Depending on your internet connection, the simulation above may take time to load. If it doesn't load within a minute, click the back button to return to this page. Then, right click on the link and choose "open link in new tab". This will allow you to continue working through the course as the simulation loads.

Now that we have discussed common injuries, how they happen, and specific ways you can be proactive in preventing injuries, let's take a look at important injury prevention elements you can add to your training program.

Please note that there are a variety of ways to prevent injuries, we are just going to focus on warming-up, stretching, and strengthening your core.

Next ▸



Warm-ups

Warming Up before a Training Session

Let's start with warm-ups.

In order to avoid the common overuse injury from starting out too fast or too cold, we activate the prone areas with a warm up routine (we will discuss the details of this routine in a few minutes). This routine slowly starts building our heart rate while giving our joints and muscles a bit of preparation with some full controlled movements. Our bodies won't be fully warmed up after this routine, so it is important to start your training session out with a slow, controlled start.

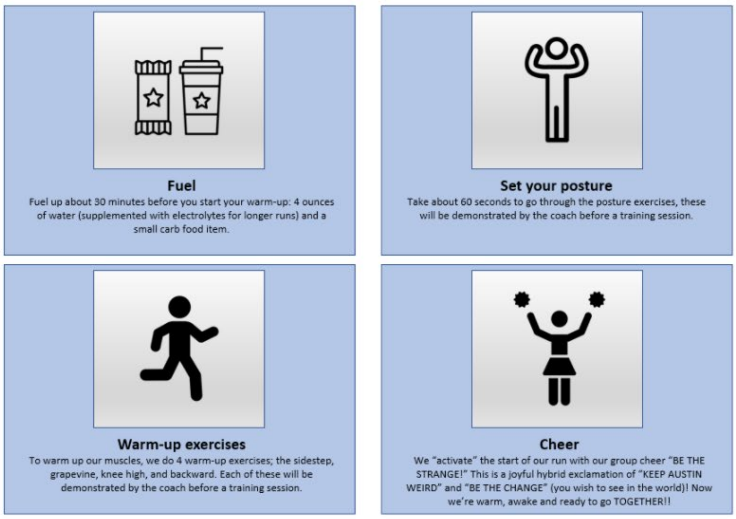
Your body generally reaches the fully "warmed" stage after about 10-15 minutes of continuous running. When your body gets to that warmed stage, the outside temperature will feel about 20 degrees warmer than it actually is.

Let's watch this video to get more insight into the science behind warming up.

Team FX Warm-up Routine

So...how does Team FX warm up?

There are four elements to Team FX's warm-up:



So, you've warmed up, completed your training session, now what? No, it's not time for tacos...yet.

That's right--stretching! Ready?

Stretching

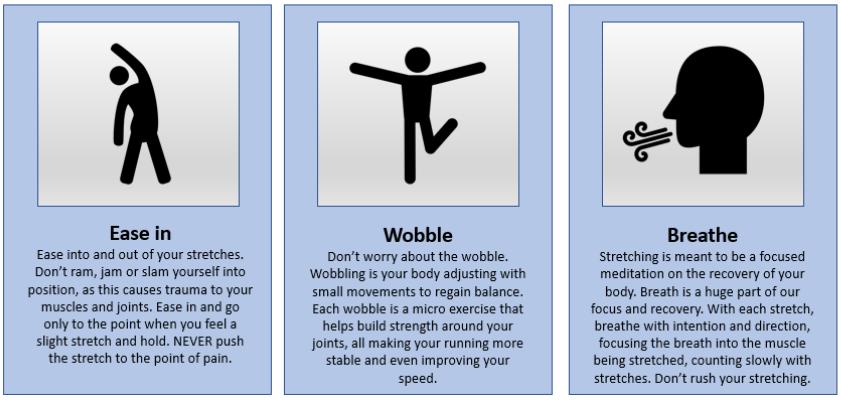
Stretching after a Training Session

Our stretch session is a series of intentional bio-mechanical movements designed to keep you flexible, balanced, and injury-free and should be completed as soon after each training run as possible, including your weekday runs and your race-day event, while your muscles are still warm. This is the most important part of recovering from your run and must not be overlooked.

For most comfort, use a yoga mat with a towel. Always warm up with at least 5 minutes of exercise before stretching, and ease slowly into your stretches, never stretch to the point of pain, and remember to breathe. When done efficiently, they should take only 20-30 minutes to complete.

You get to decide if your weekday run and stretch sessions work better for you in the morning or later in the day, but you MUST create time in your schedule for these stretches or you WILL slowly and silently develop injury.

When it comes to stretching, remember these 3 points:



Stretch for Everyday Living

We are busy with our stressful lives and are often completely unaware of our body position, strength and flexibility habits and limitations. Becoming aware of your body with these stretches will help you think about how you spend the rest of your day and how repeated positions and movements condition your body for tightness, imbalance and breakdown. This training can help you understand why you may be experiencing tight hip flexors, or other issues that lead to chronic lower back problems or ongoing pain somewhere else in your body.

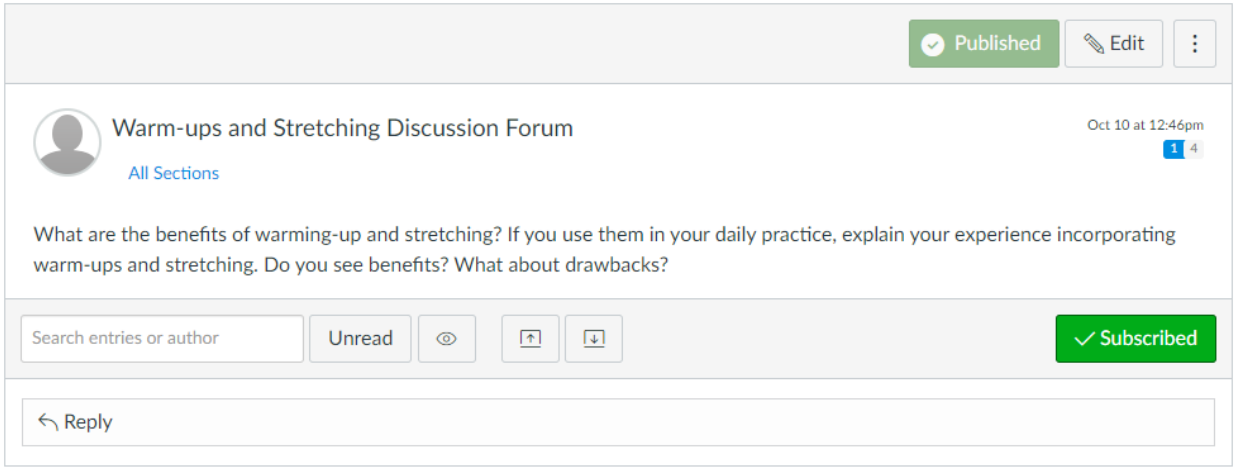
We want to help you get into alignment for a great race day experience, and bring a better flow with your health and life overall.

Click the link below to download the Team FX stretching guide.

Team FX Stretching Guide

The red areas in the images are the areas you're "working" and should have your complete mental attention. The blue arrows help with direction of movement.

◂ Previous Next ▸



Strengthening Your Core

Strengthening Your Core for Injury-Free Endurance Training

Core exercises are important because we want to strengthen the very center of your body, since your strength, balance and energy all originate from there. It's also your driving center, establishing direction and smoothness of your stride.

Your core is not just your belly, but also your lower back and your sides, so it's important to strengthen completely through, balanced front to back and side to side. Do what you can, depending on your fitness level, and you will notice improvements with time and regularity of the training.

Take a minute to watch this video over the importance of core strength for runners!

Let's review the advantages of strengthening your core:

- Become a more efficient runner
- Burn more calories
- Increase your endurance
- Reduce risk of injuries
- Run faster
- Running will feel easier
- You'll be more motivated
- Become a better athlete overall

Team FX Core Strengthening Routine

Our core/strength exercise session is 8 exercises designed to slowly activate and develop strength, balance and stability to your muscles and joints as required for a successful endurance event. For most comfort on the ground exercises, use a yoga mat with a towel. Variations can be applied if any of these are difficult. Any wobbling for balance correction is normal and helps improve your overall stability. When done efficiently, one full cycle should take about 10 minutes to complete.

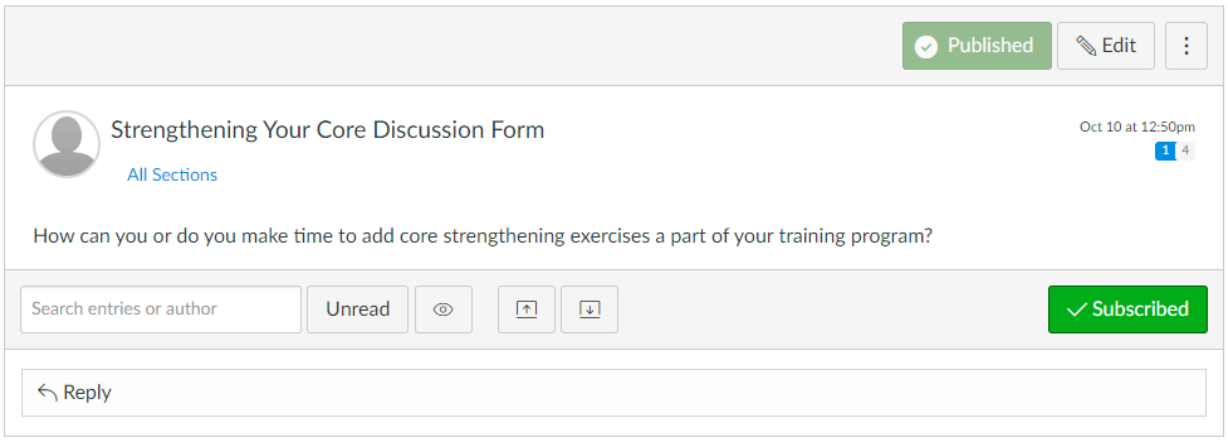
You can do these before or after your training runs to consolidate all your training to just 3 days during the week. OR You can do these on opposite days of training runs to spread the time and effort out.

As always, ask the coach if you have any questions or concerns about these exercises and remember, always warm up with at least 5 minutes of exercises before beginning by walking or cycling, ease slowly into your exercises, and remember to breathe.

Click the link below to download the Team FX core strengthening guide.

Team FX core strengthening guide

The red areas in the images are the areas you're "working" and should have your complete mental attention. The blue arrows help with direction of movement.



End of course

Congratulations and thank you for taking your time to complete this course! Remember to come back to the discussion boards, read, and reply to the other participants in the course! A large part of learning is sharing and connecting our experiences to new information.

Please be on the lookout for a post-survey which will be sent out the weekend of November 7th. Thanks again!

via GIPHY

Appendix E

Initial email to Team FX asking for volunteers to participate in the injury prevention program.

Hello, Team FX Alumni!!!

It's been such a long time! I hope this finds you well.

Team FX is growing!!! Did you know that this year, we will reach the One-Half Million Dollar mark for support we've raised together for the SAFE Children's Shelter?!!! Because of you, we have made such a huge difference, and now we are growing to make a difference to more children in more places! To improve this ability, we are improving our Injury Prevention training program, and we could use your help. We need as many alumni as possible to give us their opinions on their experience with Team FX training in Injury Prevention, as well as the new program that's in development. This will be a couple of short surveys and participation in a 35-40 minute eLearning module over the next two months. **WILL YOU PLEASE HELP US GROW???**

Please let me know TODAY if you are willing to help us out and we'll send you more info and our first six questions.

THANK YOU SO MUCH!
YOU MAKE US AWESOME!

Gary

TEAMFX
AUSTIN

Email inviting participants to complete the pre-survey

Hi everyone! Thank you for volunteering to participate in the Injury Prevention training program Gary and I are putting together.

We have developed a pre-assessment survey, this survey is designed to get a better understanding of how you train for an endurance event, what you do when you feel pain or have an injury, and get a sense of your experiences on the team so far. The survey is anonymous, so please answer as accurately as possible.

You may not be currently training for an endurance event, so you can think about your previous experience during a training season.

Please let me know if you have any questions about the survey, or have trouble accessing it.

If you could have the survey completed by **Sunday, October 4th** that would be great!! After you click submit at the end of the survey, you are finished, no need to send me an email the responses will be automatically recorded.

I will send a reminder email to the whole group Friday, October 2nd. Remember, as the survey is anonymous I won't know who has completed it, so if you have completed it then you don't need to take further action.

Survey link

Email to participants with instructions on how to access the course, and the deadline for completing the course.

Hi everyone!

Thank you again for taking the time to complete the pre-survey sent out last month.

I have designed a learning experience on injury prevention using Canvas. Canvas is a free website for instructors and learners. The course consists of 3 sections:

- Introduction to Injury Prevention
- Warm-ups and Stretching
- Core Strengthening

Each section ends with a discussion board. The purpose of the discussion board is for you to think about the information in that section, and connect it to your experiences. After posting, you should check back regularly to read and reply to the other participant's discussion posts in order to create a conversation around the topic. **Please complete the course by Saturday, November 14th.**

Please also be on the lookout for a post-survey, which will be sent the weekend of November 7th, which is to be completed when you finish the course (including reading and replying to other participants' discussion posts). This survey will help me to see what has been learned, and what your experience was taking the course.

I will be sending you an invite to your email address to create a Canvas account and log into the Injury Prevention course I designed. Attached is a video that walks you through how to create a free account, and how to navigate the course.

canvas walk through.mp4

Please do not hesitate to contact me if you have any questions!

Email inviting participants to take the post-survey

Hi everyone!

Thank you again for volunteering your time to take the pre-survey and go through the Injury Prevention course. When you have completed the course, please click here to take the post-survey. This survey will give Coach Gary and I insight into what your experiences were when taking this course.

Please complete the Injury Prevention course and the post-survey by Saturday, November 14th.

If you have not already, please accept the invitation sent through Canvas to create a free account and log into the Injury Prevention course. Please use the video below to guide you

canvas walk through.mp4

If you have any questions or concerns please reach out to me at stephanieculver006@gmail.com

Thank you!!

Appendix F

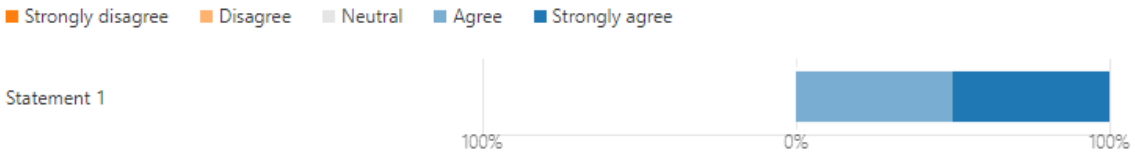
Post-survey results

1. In the future, the first thing I will do when I experience pain during a training session is

More Details

2. This course increased my understanding of how to prevent injuries while training for an endurance event.

More Details



3. Explain why you chose the above rating.

6 Responses

ID ↑	Name	Responses
1	anonymous	It's a good overview of the basics and what specifically to watch out for + how to address issues.
2	anonymous	I had no clear understanding of what caused the injuries or how to correct them
3	anonymous	I take injury prevention seriously (since getting injured before). The course reminded me that I need to discuss injuries with Gary rather than trying to just deal with them myself.
4	anonymous	It's not that I learned anything, necessarily, but the course reminded me about why these things are important.
5	anonymous	Given my experience with Plantar Fasciitis I know for fact the value of this course. :-) The one thing is instead of discussing pain w/Coach Gary I'd probably check-in with my orthopedist since she already has the x-rays of my feet, etc. But for folks who don't I can see that's good advice.
6	anonymous	There was a good balance of explanations along with the team core and stretching charts. The communications from other team members is helpful. This is another opportunity to check ourselves to remind us to be thoughtful about all aspects of our training.

4. This course changed my thought process on how I can stay injury free while training for endurance events.

More Details

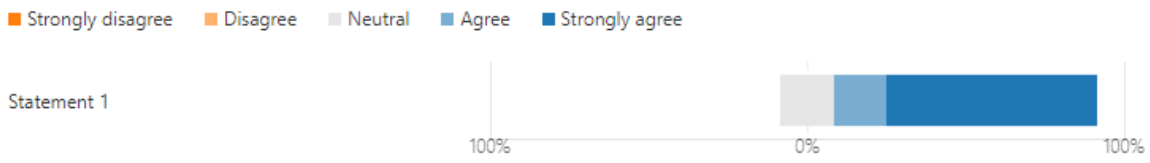
5. Explain why you chose the above rating.

6 Responses

ID ↑	Name	Responses
1	anonymous	Simple and short, but with useful guidance.
2	anonymous	I continually work on my form and posture
3	anonymous	I knew a good amount of the information from previous reading materials.
4	anonymous	Again, this course served more as a reminder for me but it specifically highlights for me that I need to be more serious about strength training.
5	anonymous	Really glad I'm doing core this season and will be more diligent about post-training stretched on the weekdays.
6	anonymous	The course is a good reminder of what we have been taught.

6. I found the course in Canvas easy to navigate.

More Details



7. Explain why you chose the above rating.

4 Responses

ID ↑	Name	Responses
1	anonymous	It was good. I wished, though, it would have a visual indicator of the items I read/watched as I went through it. Also, the one video didn't have a proceed action available, so I had to click the back arrow to return to the previous page before advancing to the next section.
2	anonymous	Nothing to say here. It was easy and intuitive.
3	anonymous	It's pretty basic e.g. forward / next.
4	anonymous	Since I am computer challenged it took several attempts to start and complete. It was not overwhelming but just took some extra time.

8. Which of the following learning formats did you feel helped add to your understanding of the information presented in the Injury Prevention course?

More Details

Text	4
Videos	4
Printable PDF handouts	4
Sophie scenario simulation	3
Discussion forums	2

9. Of the above formats, was there one that stood out to you as being more effective than the others?

6 Responses

ID ↑	Name	Responses
1	anonymous	These were the most clear because they remain in the flow. The others are useful resources as needed.
2	anonymous	I often refer back to the weekly emails with downloaded details. I think I refer back to them more now than when in training
3	anonymous	I really liked the simulation. Always great to test out knowledge.
4	anonymous	I always like a combination of text and videos to help me absorb and retain material. On the other hand, the PDFs are useful as a reference in the future.
5	anonymous	Text. I'm not a fan of video (I can read faster than watch) but that's probably just me.
6	anonymous	videos, hand outs and discussion.